



CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005



Job No.: CTCE/BBMP/W.No.17/MK/SDBC/Bit/2014-15

05.05.2014

BITUMEN CONTENT GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

As per IS2386 and IRC:SP:11-1984

CLIENT	Asst. Executive Engineer, Yeshwanthapura Sub Division, BBMP, Bangalore.
AGENCY	Mr. M. Krishnamurthy, Contractor, Bangalore.
NAME OF THE WORK	Providing and laying HDPE Water line in Ganesha Temple Block - II in J P Park, Ward No.17, BBMP, Bangalore.
REFERENCE	EE/RRND/Wo.No/223/2013-14 Dated: 05.02.2014
SAMPLE I/D	HDPE Water line in Ganesha Temple Block - II in J P Park, Ward No.17.
DATE OF TESTING	05.05.2014



GRADATION AFTER EXTRACTION

Sieve Size in mm	Trail 1				Specified Limits as per MORTH specification table 500-15 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
13.2	0	0	0	100	100
9.5	31.29	6.59	6.59	93.41	90-100
4.75	250.6	52.76	59.35	40.65	35-51
2.36	59.36	12.50	71.84	28.16	24-39
1.18	40.21	8.47	80.31	19.69	15-30
0.3	32.26	6.79	87.10	12.90	9-19
0.075	25.35	5.34	92.44	7.56	3-8

Sieve Size in mm	Trail 2				Specified Limits as per MORTH specification table 500-15 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
13.2	0	0	0	100	100
9.5	24.12	5.09	5.09	94.91	90-100
4.75	255.6	53.92	59.01	40.99	35-51
2.36	53.32	11.25	70.26	29.74	24-39
1.18	33.26	7.02	77.28	22.72	15-30
0.3	30.22	6.38	83.65	16.35	9-19
0.075	42.32	8.93	92.58	7.42	3-8

Note:

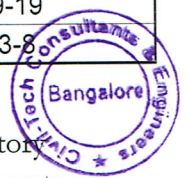
- ⌞ This test report should not be reproduced except in full, without written approval of the laboratory.
- ⌞ The results indicated above are based on the tests carried out on the samples received in the laboratory
- ⌞ Any Query regarding the report must be reported within 30 days from the date of testing.

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05.05.2014

Aggregate Gradation Test

IS : 2386 Part I

Client	Asst. Executive Engineer, Yeshwanthapura Sub Division, BBMP, Bangalore.
Agency	Mr. M. Krishnamurthy, Contractor, Bangalore.
Name of the Work	Providing and laying HDPE Water line in Ganesha Temple Block - II in J P Park, Ward No.17, BBMP, Bangalore.
Reference	EE/RRND/Wo.No/223/2013-14 Dated: 05.02.2014
Sample I / D	Hot Mix Plant, Bangalore
Type of Mix	Semi Dense Bituminous Concrete (SDBC)
Date of Testing	05.05.2014



Total Weight of Sample: 5150 gm

SIEVE SIZE, mm	Weight Retained, gm	% Retained	Cummulative % Retained	% Passing	Grade-II As per MORTH	Remarks
13.2	0	0.0	0	100	100	Gradation satisfies Grade-II MORTH specification
9.5	400	7.8	7.77	92.23	90-100	
4.75	2515	48.8	56.60	43.40	35-51	
2.36	625	12.1	68.74	31.26	24-39	
1.18	480	9.3	78.06	21.94	15-30	
0.3	390	7.6	85.63	14.37	9-19	
0.075	410	8.0	93.59	6.41	3-8	

Total Weight of Sample: 5250 gm

SIEVE SIZE, mm	Weight Retained, gm	% Retained	Cummulative % Retained	% Passing	Grade-II As per MORTH	Remarks
13.2	0	0.0	0	100	100	Gradation satisfies Grade-II MORTH specification
9.5	325	6.2	6.19	93.81	90-100	
4.75	2505	47.7	53.90	46.10	35-51	
2.36	1025	19.5	73.43	26.57	24-39	
1.18	530	10.1	83.52	16.48	15-30	
0.3	315	6.0	89.52	10.48	9-19	
0.075	300	5.7	95.24	4.76	3-8	

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